



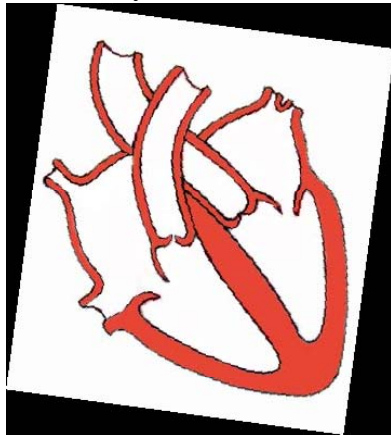
## *X-Plain™* *Mitral Valve Prolapse* **Reference Summary**

Mitral valve prolapse, also called MVP, is a common condition that affects millions of Americans.

If you are diagnosed with a mitral valve prolapse, it is important to be aware of certain precautions you need to take to protect the health of your heart. This reference summary explains what mitral valve prolapse is and offers some tips for keeping your heart healthy.

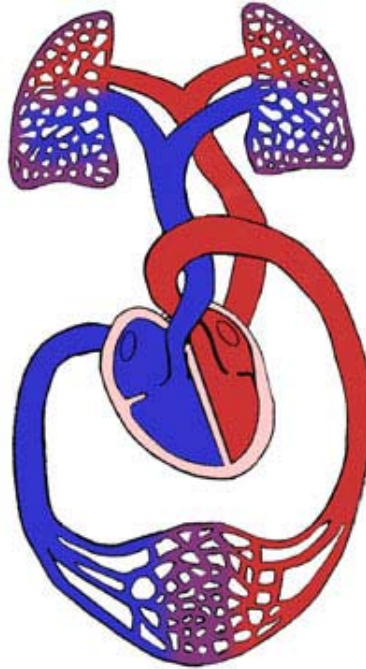
### **Heart Anatomy**

The heart is the most important muscle in the body. Its main function is to pump blood to the lungs and the rest of the body.



The heart has 2 main sections: the right heart and the left heart. Each half of the heart has 2 chambers: an atrium and a ventricle. The ventricles

are the main pumps of the heart.



Blood coming from the body enters the right atrium of the heart through 2 big veins. Next, it is pumped into the right ventricle through a valve called the “tricuspid valve.” It is called tricuspid because it has 3 “flaps,” or cusps, and “tri” means 3.

The blood is then pumped into the lungs through the “pulmonary valve.” In the lungs, the blood is loaded with oxygen. It then returns to the left atrium of the heart. Next, the blood is pumped into the left ventricle through the “mitral valve.” The left ventricle

pumps blood to the rest of the body through the “aortic valve.”

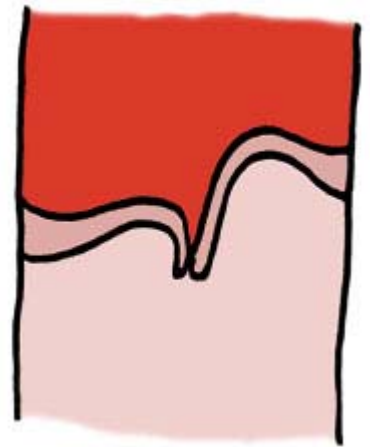
Heart valves have 2 functions: Allow blood to flow through the heart smoothly.

Prevent blood from flowing the wrong way.

Your heartbeat can always be heard with a stethoscope. However, healthy valves open and close without making any noises that a doctor can hear with a stethoscope.

### **Mitral Valve Prolapse**

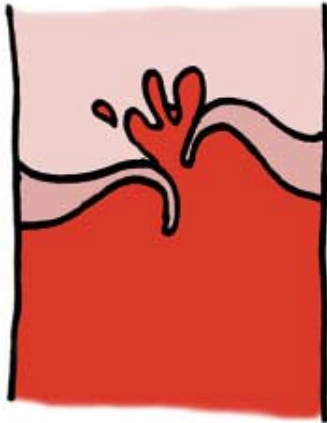
Prolapse is another word for when the mitral valve flaps back slightly into the left atrium after it closes. This usually happens if the flap of the valve is not the right size.



An abnormality in a valve, such as the flap being the wrong size, is usually something a person is born with.

The function of the heart is not typically affected by mitral valve prolapse.

When the valve in an MVP patient closes, it causes a “click” noise that can be heard using a stethoscope. Sometimes a valve does not close all the way and allows some blood to leak back into the atrium. This is called “mitral regurgitation.” When this happens, a “murmur” can be heard right after the “click.”



Regurgitation associated with mitral valve prolapse does NOT usually affect the way the heart functions unlike other potentially more serious valve problems. Occasionally, the mitral valve may not have as smooth a surface as a normal mitral valve, which may make it more likely to get infected.

### Symptoms & Complications

Most people who have MVP do not feel any pain or discomfort. Some patients feel short of breath, have irregular heartbeats, or dizziness.

These symptoms are like other symptoms of heart disease and

may not be related to MVP. Patients who have mitral regurgitation have an increased risk of getting an infection in the lining of the heart called bacterial endocarditis. Such an infection could cause damage or scarring in the valves.

### Diagnosis

Your doctor will need to take a detailed medical history and do a physical examination in order to diagnose MVP. If you have experienced any heart palpitations, chest tightness, or chest pain, you should tell your doctor. Patients with MVP or more serious heart problems commonly have these kinds of symptoms.

A heart tracing or electrocardiogram (EKG) will probably be done. If needed, the EKG may also be done during exercise; this is known as a stress EKG. Once in awhile, the doctor will request a heart tracing that is monitored for up to 24 hours using a portable EKG, known as a Holter monitor. This allows the doctor to detect and diagnose heart palpitations that only occur every now and then.

Your doctor may also request an echocardiogram. An echocardiogram is an ultrasound test like the one used to look at the baby inside a pregnant woman. It shows heart structures in great detail, including the mitral valve.

### Treatment Options

In most cases, no treatment is needed for mitral valve

prolapse. For patients with mitral regurgitation, doctors may prescribe medications to lower the blood pressure. For patients with more severe regurgitation and other possible complications, the doctor will recommend more frequent follow-up visits. If needed, surgical treatment is available to repair or replace valves.

Patients with MVP should take antibiotics before they have dental work, surgery, or any medical procedure to prevent infections from settling on the mitral valve. Call your doctor if you experience any of the following symptoms of bacterial endocarditis:

fever that does not go away  
chills, sweating and loss of appetite.

Patients with MVP can typically live a normal life with no restrictions. Like everyone else, people with MVP could develop other kinds of heart problems; for this reason, any new symptoms should be reported to the doctor.

### Living Healthy

The following pages show the 10 most important guidelines to remember for living a healthy lifestyle. You can actually improve the health of your heart by living healthy!

Do not smoke.

Be physically active, under your doctor's supervision.

Eat a healthy, balanced diet rich in fiber and low in fat. If you have irregular heartbeats,

cutting down on caffeine can reduce heart palpitations.  
Check the level of cholesterol in your blood. If it is high, get it under control.  
Check your blood pressure regularly. If it is high, keep it under control.  
Lose weight if you are overweight.  
Do not use illicit drugs and do not abuse alcohol.  
Check the level of sugar in your blood. If it is high, keep it under control.  
Get enough sleep at night.  
Manage stress in your life.

### **Summary**

Mitral valve prolapse is a common heart condition caused by an abnormally shaped valve. Patients should tell their healthcare providers that they have MVP so antibiotics can be prescribed before any surgical or dental procedures are performed. Most patients with MVP live a long and healthy life without ever being affected by it.